

Farhan Damani

Education

2017- **PhD, Computer Science**, *Princeton University*.

2012–2017 **BS, Computer Science**, *Johns Hopkins University*.

Cumulative GPA: 3.48/4.0; Computer Science GPA: 3.87/4.0

GRE: Quantitative 170/170 (97th percentile); Verbal 159/170 (82nd percentile); Writing 5.5/6 (98th percentile)

Research Experience

Battle Lab, Department of Computer Science at Johns Hopkins University

January 2015 - August 2017 Developed a Bayesian hierarchical model to understand the impact of genetic variation on molecular traits.

Prosthetics team at Applied Physics Lab, Laurel, MD

June 2014- January 2015 Implemented an open source grasp planner to determine stable grasp points for the Modular Prosthetic Limb (MPL). Also worked on implementing a grasp quality metric using force sensors to compare the MPL to other low dexterity robotic manipulators.

Presentations

2016 Damani F., et al. *Predicting tissue-specific effects of rare genetic variants*. Biological Data Science at Cold Spring Harbor Laboratory. 2016 (talk).

2016 Invited talk at Princeton University.

2016 Damani F., et al. *Exploring effects of rare non-coding variants*. Symposium on Advances in Genomics, Epidemiology, and Statistics. University of Pennsylvania Perelman School of Medicine. Philadelphia, PA. (poster).

Publications

2016 Damani F., Kim Y., Li X., Tsang E., Davis J., Chiang C., Zappala Z., Strober B., Scott A., Hall I., GTEx Consortium, Montgomery S., Battle A. *A framework for predicting tissue-specific effects of rare genetic variants*. In preparation. Manuscript available here: <http://goo.gl/85qLFj>

2016 Li X., Kim Y., Tsang E., Davis J., Damani F., Chiang C., Zappala Z., Strober B., Scott A., Ganna A., Merker J., GTEx Consortium, Battle A., Montgomery S. *The impact of rare variation on gene expression across tissues*. *Nature*, 2017.

- 2016 Chiang C., Scott A., Davis J., Tsang E., Li X., Kim Y., Damani F., Ganel L., GTEx Consortium, Montgomery S., Battle A., Conrad D., Hall I. *The impact of structural variation on gene expression. Nature Genetics, 2017.*

Awards

- 2017 National Science Foundation Graduate Research Fellowship Honorable Mention
- 2015 Joseph C. Pistritto Fellowship recipient (Johns Hopkins Department of Computer Science research fellowship)
- 2016 Acheson J. Duncan Fund recipient (Johns Hopkins Department of Applied Mathematics and Statistics award to support research projects in statistics.)

Media

- 2014 Johns Hopkins Engineering Magazine feature for work on prosthetics development and artificial intelligence as a summer intern and part-time employee in fall 2014 at the Applied Physics Lab. See <http://engineering.jhu.edu/magazine/2014/12/spured-get-better-grasp/#.VJm0o8AB0U> for details.
- 2014 One-on-one interview for work in prosthetics. Details here <https://rising.jhu.edu/spur>.

Activites

- 2014-2015 Founder of the first intern think tank at the Applied Physics Lab. Led weekly meetings for 300+ interns to discuss engineering problems of interest and potential solutions.
- 2012-2014 Journalist for Ismaili USA Magazine, most widely distributed Muslim magazine in the country (over 500,000 subscribers).